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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,152

10/07/2005

Takayasu Taniguchi

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38834 7590 10/26/2007  
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EXAMINER

HAND, MELANIE JO

ART UNIT

PAPER NUMBER

3761

MAIL DATE

DELIVERY MODE

10/26/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/552,152

Applicant(s)

TANIGUCHI ET AL.

Examiner

Melanie J. Hand

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/2/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see Remarks, filed August 2, 2007, with respect to the rejection(s) of claim(s) 1-8 under 35 U.S.C. 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art reference.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 2, 2007 has been entered.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on August 2, 2006 was filed after the mailing date of the final action on May 24, 2007. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosokawa et al (U.S. Patent No. 6,703,451) in view of Quincy et al (WO 00/50098 A1).

With respect to claim 1: Hosokawa teaches a water-absorbing resin compound, which comprises a water-absorbing resin, an antibacterial agent incorporating an antibacterial metal in the form of titanium or zirconium, and a metal chelating agent, wherein the water-absorbing resin is a cross-linked polymer of an acrylic acid salt. ('451, Col. 2, lines 50-60, Col. 3, lines 1-5)

Hosokawa does not teach that the antimicrobial agent has a porous material incorporating said antibacterial metal. Quincy teaches a compound having a water absorbent resin, an antibacterial agent inasmuch as Quincy teaches that the odor control agent neutralizes odor-causing elements, which include bacteria and a metal chelating agent. Quincy teaches that the compound contains a superabsorbent material which can either be said resin or a silica gel, which is a porous material incorporating an antibacterial metal, i.e. silicon dioxide. Quincy teaches that the compound controls odor on a substrate, as does the compound of Hosokawa, therefore it would be obvious to one of ordinary skill in the art to modify the compound of Hosokawa such that the compound includes silica gel, which will necessarily function as an antibacterial agent as taught by Quincy. The combined teaching of Hosokawa and Quincy thus teaches an antimicrobial agent having a porous material (silica gel) that is capable of incorporating the antimicrobial metal taught by Hosokawa. It would further be obvious to modify the article of Hosokawa and Quincy to incorporate the metal in the silica gel with a reasonable

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expectation of success as the gel is capable of incorporating the metal and the silica gel would also ensure that the metal remains in place to perform its intended function as an odor-control agent. ('098, Page 10, line 29- Page 11, line 9, Page 18, lines 28-30)

With respect to **claim 2**: The content of the antibacterial agent is 0.001-1 parts by weight with respect to 100 parts by weight of the water-absorbing resin. ('451, Col. 6, lines 59-63)

With respect to **claim 3**: The content of the antibacterial metal incorporated in antibacterial agent is 0.1-15 parts by weight with respect to 100 parts by weight of the agent, which is equivalent to the porous material (taught by Quincy) since the porous material is the only other component of the agent of the combined teaching of Hosokawa and Quincy. ('451, Col. 5, lines 11-13) The motivation to combine the teachings of Hosokawa and Quincy is stated *supra* with respect to claim 1.

With respect to **claim 4**: The content of the metal chelating agent is 0.01-10 parts by weight with respect to 100 parts by weight of the water-absorbing resin. ('451, Col. 9, lines 18-21)

With respect to **claim 5**: The metal chelating agent is an aminocarboxylic acid metal chelating agent. ('451, Col. 7, lines 11-18)

With respect to **claim 6**: The aminocarboxylic acid metal chelating agent is ethylenediaminetetraacetic acid (EDTA). ('451, Col. 7, line 19)

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With respect to **claim 7**: Hosokawa teaches an absorbing material that comprises a water-absorbing resin compound according to the claimed invention, and a hydrophilic fiber in the form of cellulosic fluff pulp. ('451, Col. 10, lines 45-48)

With respect to **claim 8**: Hosokawa teaches an absorbing product, which comprises a liquid-permeable sheet; a liquid-non-permeable sheet; and an absorbing material comprising a water-absorbing resin compound according to the claimed invention and a hydrophilic fiber, wherein the absorbing material lies between the liquid-permeable sheet and the liquid-non-permeable sheet. ('451, Col. 10, lines 41-48)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand  
Examiner  
Art Unit 3761

October 24, 2007

TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Tatyana', written over the printed name and title.



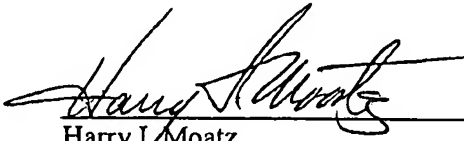
**BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE  
UNITED STATES PATENT AND TRADEMARK OFFICE**

**LIMITED RECOGNITION UNDER 37 CFR § 11.9(b)**

Shuji Yoshizaki is hereby given limited recognition under 37 CFR §11.9(b) as an employee of Westerman Hattori Daniels & Adrian, LLP, to prepare and prosecute patent applications wherein the patent applicant is the client of Westerman Hattori Daniels & Adrian, LLP, and the attorney or agent of record in the applications is a registered practitioner who is a member of Westerman Hattori Daniels & Adrian, LLP. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Shuji Yoshizaki ceases to lawfully reside in the United States, (ii) Shuji Yoshizaki's employment with Westerman Hattori Daniels & Adrian, LLP ceases or is terminated, or (iii) Shuji Yoshizaki ceases to remain or reside in the United States on an H-1B visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Limited Recognition No. L0111.  
Expires: July 7, 2010

  
\_\_\_\_\_  
Harry I. Moatz  
Director of Enrollment and Discipline